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DAVID W LYNCH CRAWFORD MAUNU PLLC 1270 NORTHLAND DRIVE SUITE 390 MENDOTA HEIGHTS, MN 55120			SHAH, NILESH R	
			ART UNIT	PAPER NUMBER
			2127	9
DATE MAILED: 02/11/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/550,420	HARRISON ET AL.
	Examiner	Art Unit
	Nilesh R Shah	2127

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 November 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-37 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-37 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 April 2000 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

## **DETAILED ACTION**

### *Response to Amendment*

Applicant states that Debes fails to teach assigning priority values to data channels. A data channel is defined as a path or link through which information passes between two channels. Debes clearly teaches the use of prioritizing assignments bases on job type. (col. 12 lines 26-48) ('Job Type Priority: A priority assigned according to job or user type. An exemplary priority assignment, based on job type, is provided below.')

Debes continues to teach the use of an priority based queue management system (col. 16 lines 24-50) ('Referring to FIG. 8, an embodiment in which a priority-based queue management scheme for determining the next job to obtain a system's resource is discussed. In the illustrated embodiment of FIG. 8, a job's priority is based on the service that created the job. Preferably, the SA/KO sets the relative priority of each service from which a job is obtained in a queue.') ('The priority-based queue management scheme is particularly useful in the area of job interrupt. The table of FIG. 8 (also see Table 1 above) specifies when the job of one service can interrupt the job of another service. This view of interruption may be referred to as interruptability. The SANKO preferably develops the interruptability matrix of FIG. 8, which matrix sets forth the interruptability relationships between jobs of a plurality of service types.')

Art Unit: 2127

Applicant states ' Debes does not mention print jobs being received over different data channels'. Debes teaches the use of at least FIVE different printing methods, including copy print, auto report print, net print, fax mailbox, and fax print (col. 11 lines 20- col. 12 lines 29)

Clearly Debes teaches the use of printing based on priority.

### **Claim Rejections - 35 USC § 102**

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Debes et al (5,970,223) (hereinafter Debes).

As per claim 1, Debes teaches a method for dictating the order that print jobs received over multiple data channels are printed, comprising (col. 8 lines 22-38, col. 11 lines 9-19) ('Referring to FIGS. 2 and 3, three I/O components are shown as being coupled operatively to the VBus 28, namely a FAX module 48, the scanner or IIT 18, and the printer or IOT 20; however, it should be recognized that a wide variety of components could be coupled to the VBus by way an expansion slot 50. Referring to FIG. 5, an implementation for the FAX module, which is coupled to the VBus 28 by way of transfer module 36b, is discussed in further detail.')('In any multifunctional product (also referred to below as "MF Engine"), such as the printing system 10 described above,

there is always the potential of multiple users requiring access to one or more subsystems at the same time.’):

assigning priority values to data channels that receive print jobs (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) (‘priority assigned according to job or user type. An exemplary priority assignment, based on job type,’);

associating the priority value assigned to the data channel with the print jobs received at its respective data channel (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) (‘priority assigned according to job or user type. An exemplary priority assignment, based on job type,’) and

printing the print jobs in an order corresponding to their associated priority values (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) (‘In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.’)

As per claim 2, Debes teaches a method wherein assigning a priority value comprises assigning a different priority value to each data channel that receives the print jobs (col. 16 lines 36-67) (‘When a job is created within the printing system 10 (FIG. 1), the job is assigned a priority based on service type’).

As per claim 3, Debes teaches a method wherein assigning a priority value comprises assigning two or more of the data channels equal priority values, and wherein printing the print jobs comprises printing the print jobs received via the two or more data channels having equal priority values in an order in which they were received via the data channels (col. 14 lines 38-67) ('If two jobs have the same assigned priority then they are queued according to the time stamp they receive upon entering the queue (i.e., FIFO managed)').

As per claim 4 Debes teaches a method wherein printing the print jobs in an order corresponding to their associated priority values comprises printing the print jobs in an order from highest priority to lowest priority (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.')

As per claim 5, Debes teaches a method wherein at least one of the data channels is dedicated as an internal print data channel to receive internally generated print jobs (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In this method access to resources is managed with a Key Operator/System Administrator ("KO/SA") defined algorithm. With this algorithm, the KO/SA can arrange to have jobs defined according to job type, immediate walkup need, history of interruptions and other relevant factors. The algorithm can be configured to manage job contention in accordance with the desires of a typical printing system user.').

As per claim 6, Debes teaches a method wherein assigning the priority value to the data channel that receives print jobs comprises assigning the internal print data channel the highest possible priority (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) (“in this method access to resources is managed with a Key Operator/System Administrator (“KO/SA”) defined algorithm. With this algorithm, the KO/SA can arrange to have jobs defined according to job type, immediate walkup need, history of interruptions and other relevant factors. The algorithm can be configured to manage job contention in accordance with the desires of a typical printing system user.”).

As per claim 7, Debes teaches a method wherein assigning the priority value to the data channel comprises assigning a priority value to each of the data channels that receives a different predefined group of print job types (col. 1 lines 5-32, col. 6 lines 9-56). (“After desired conditions have been entered on the operation panel 2, the document feeder 1 conveys a document to a predetermined reading position on an image reading device 3 and, after the document has been read, drives it away from the reading position.”)

As per claim 8, Debes teaches a method further comprising:

determining whether a plurality of the print jobs currently pending have equivalent associated priority values (col. 14 lines 38-67) (“If two jobs have the same assigned priority then they are queued according to the time stamp they receive upon entering the queue (i.e., FIFO managed”); and

printing the print jobs that have the equivalent associated priority values in an order in which they were received via their respective data channels (col. 14 lines 38-67) ('If two jobs have the same assigned priority then they are queued according to the time stamp they receive upon entering the queue (i.e., FIFO managed)').

As per claim 9, Debes teaches a method further comprising determining the order in which the print jobs having equivalent associated priority values were received by monitoring time of arrival of the print jobs (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In this method contention is handled on a first come first serve basis. Jobs submitted ahead of other jobs have first use of the required resource. Other jobs requesting that service are numerically ordered by their time of arrival and eventually have the opportunity to use the service.')

As per claim 10, Debes a method further comprising determining the order in which the print jobs having equivalent associated priority values were received by queuing the print jobs having equivalent associated priority values in a first in first out arrangement (col. 14 lines 38-67) ('If two jobs have the same assigned priority then they are queued according to the time stamp they receive upon entering the queue (i.e., FIFO managed)').

As per claim 11, Debes teaches a method of further comprising queuing the print jobs in a increasing order according to their respective priority values, and forwarding the print jobs to a

print engine for printing in the order in which the print jobs are queued (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.')

As per claim 12, Debes teaches a method further comprising queuing the print jobs in an order of receipt of the print jobs, and sending the print jobs to a print engine for printing in a sequential order corresponding to the respective priority values associated with the print jobs (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.')

As per claim 13 Debes teaches a method wherein assigning the priority value comprises assigning the priority value upon initialization of a printing device designated for printing the print jobs. (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('A priority assigned according to job or user type. An exemplary priority assignment, based on job type,')

As per claim 14, Debes teaches method wherein assigning the priority value comprises assigning the priority value via a user interface by a user granted authority to reassign the priority values to selected ones of the data channels. (col. 17 lines 40-59) ('The second concept provides the

KO/SA with the ability to increment a job's priority (beyond that of the first concept above) on the basis of the "reason for" or "method of" creating the job. In one aspect of the second concept, the printing system 10 would support priority valuation for two levels of interrupt, namely "interrupt1" and "interrupt2".')

As per claim 15, Debes teaches a computer readable medium having computer executable instructions for performing steps comprising:

assigning priority values to data channels that receive print jobs col. 8 lines 22-38, col. 11 lines 9-19) ('Referring to FIGS. 2 and 3, three I/O components are shown as being coupled operatively to the VBus 28, namely a FAX module 48, the scanner or IIT 18, and the printer or IOT 20; however, it should be recognized that a wide variety of components could be coupled to the VBus by way an expansion slot 50. Referring to FIG. 5, an implementation for the FAX module, which is coupled to the VBus 28 by way of transfer module 36b, is discussed in further detail.')('In any multifunctional product (also referred to below as "MF Engine"), such as the printing system 10 described above, there is always the potential of multiple users requiring access to one or more subsystems at the same time.');

associating the priority value assigned to the data channel with the print jobs received at its respective data channel (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,'); and

printing the print jobs in an order corresponding to their associated priority values col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.' )

As per claim 16, Debes teaches a printing device coupled to receive print jobs transmitted by one or more computing devices, the printing device comprising:

a plurality of data channels to receive the print jobs, wherein the data channels are assigned respective priority values (col. 16 lines 36-67) ('When a job is created within the printing system 10 (FIG. 1), the job is assigned a priority based on service type'),

wherein the print jobs received at the data channels assumes the priority value of its respective one of the data channels a compare module coupled to receive the priority values corresponding the received print jobs and to identify the print job exhibiting the highest priority (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.' ); and

a print engine to print the print jobs in an order from the highest priority to the lowest priority as identified by the compare module (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing

system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.’)

As per claim 17, Debes teaches a printing device further comprising one or more print queues coupled to receive and output the print jobs in an order received wherein the print jobs are received in the order of the highest priority to the lowest priority (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) (“In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.’)

As per claim 18, Debes teaches a printing device further comprising one or more print queues coupled to receive the print jobs in an order received, and to output the print jobs in an order corresponding to their respective priority values (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) (“In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.’)

As per claim 19 Debes teaches a printing device further comprising a job monitor module coupled to the plurality of data channels to receive and store the priority values associated with

Art Unit: 2127

the print jobs that are currently pending (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('Referring to FIGS. 2 and 3, three I/O components are shown as being coupled operatively to the VBus 28, namely a FAX module 48, the scanner or IIT 18, and the printer or IOT 20; however, it should be recognized that a wide variety of components could be coupled to the VBus by way an expansion slot 50. Referring to FIG. 5, an implementation for the FAX module, which is coupled to the VBus 28 by way of transfer module 36b, is discussed in further detail.')('In any multifunctional product (also referred to below as "MF Engine"), such as the printing system 10 described above, there is always the potential of multiple users requiring access to one or more subsystems at the same time.'):

As per claim 20, Debes teaches a printing device wherein the compare module is coupled to the job monitor module to receive the stored priority values, and to identify the print job exhibiting the highest priority in response thereto (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.')

As per claim 21, Debes teaches a printing device wherein the plurality of data channels comprise an internal print data channel in which internally generated print jobs are received (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67)(' n this method access to resources is

managed with a Key Operator/System Administrator ("KO/SA") defined algorithm. With this algorithm, the KO/SA can arrange to have jobs defined according to job type, immediate walkup need, history of interruptions and other relevant factors. The algorithm can be configured to manage job contention in accordance with the desires of a typical printing system user.').

As per claim 22 Debes teaches a printing device wherein the internal print data channel is preassigned to the highest priority in a range of the priority values (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.' )

As per claim 23, Debes teaches a printing device further comprising a user interface coupled to the internal print data channel to allow a user to select print features to initiate the internally generated print jobs (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ) ('Referring to FIGS. 2 and 3, three I/O components are shown as being coupled operatively to the VBus 28, namely a FAX module 48, the scanner or IIT 18, and the printer or IOT 20; however, it should be recognized that a wide variety of components could be coupled to the VBus by way an expansion slot 50. Referring to FIG. 5, an implementation for the FAX module, which is coupled to the VBus 28 by way of transfer module 36b, is discussed in further detail.')('In any multifunctional product (also referred to below as "MF Engine"), such as the printing system 10 described above, there is always the potential of multiple users requiring access to one or more subsystems at the same time.'):

As per claim 24, Debes teaches a printing device further comprising an internal print module to generate the internally generated print jobs corresponding to the selected print features (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('Referring to FIGS. 2 and 3, three I/O components are shown as being coupled operatively to the VBus 28, namely a FAX module 48, the scanner or IIT 18, and the printer or IOT 20; however, it should be recognized that a wide variety of components could be coupled to the VBus by way an expansion slot 50. Referring to FIG. 5, an implementation for the FAX module, which is coupled to the VBus 28 by way of transfer module 36b, is discussed in further detail.')('In any multifunctional product (also referred to below as "MF Engine"), such as the printing system 10 described above, there is always the potential of multiple users requiring access to one or more subsystems at the same time.'):

As per claim 25, Debes teaches a printing device wherein the priority of the print job is inversely proportional to the priority value associated with the print job (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.')

As per claim 26, Debes teaches a printing system for printing data transmitted via print jobs, the system comprising:

one or more computing devices arranged in a network, wherein the one or more computing devices transmit the print jobs over the network (col. 6 lines 57-67) ('Referring to FIG. 2, a multifunctional, network adaptive printing system is designated by the numeral 10. The printing system 10 includes a printing machine 12 operatively coupled with a network service module 14.'');

a printing device coupled to the network to receive the print jobs transmitted by the one or more computing device, the printing device comprising (col. 6 lines 57-67) ('Referring to FIG. 2, a multifunctional, network adaptive printing system is designated by the numeral 10. The printing system 10 includes a printing machine 12 operatively coupled with a network service module 14.'');

(a) a plurality of data channels to receive the print jobs, wherein the data channels are assigned a priority value, and wherein the print jobs received at the data channels assume the priority value of its respective one of the data channels (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,');

(b) a compare module to receive the priority values corresponding to the received print jobs and to identify the print job exhibiting the highest priority (col. 8 lines 22-38, col. 11 line 20 – col. 12

Art Unit: 2127

line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.');

(c) a print engine to print the print jobs in an order from the highest priority to the lowest priority as identified by the compare module (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.')

As per claim 27, Debes teaches a printing system wherein each of the data channels is assigned a different priority value (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,')

As per claim 28, Debes teaches a printing system wherein each of the data channels corresponds to a predefined group of print job types (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,')

Art Unit: 2127

As per claim 29, Debes teaches a method of dictating the order in which print jobs are printed on a printing device, comprising:

providing a plurality of data channels to receive print jobs, wherein the data channels receive predefined groups of print job types (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,');

assigning a priority value to the data channels that receive print jobs (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,');

associating the priority value of the data channels with the print jobs received at the respective one of the data channels;

determining relative priorities of the print jobs based on their associated priority values (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,');

printing the print jobs in a sequence corresponding to the relative priorities associated with the print jobs (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.')

As per claim 30, Debes teaches a method wherein printing the print jobs in a sequence comprises printing the print jobs in a sequence of highest priority to lowest priority (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.')

As per claim 31, Debes teaches a method further comprising:

designating one of the data channels as an internal print data channel to receive internally generated print jobs(col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67)(‘ n this method access to resources is managed with a Key Operator/System Administrator ("KO/SA") defined algorithm. With this algorithm, the KO/SA can arrange to have jobs defined according to job type, immediate walkup need, history of interruptions and other relevant factors.

The algorithm can be configured to manage job contention in accordance with the desires of a typical printing system user.'); and

pre-assigning a priority value to the internal print data channel that represents the highest possible priority value of a priority value range of priority values(col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,');

As per claim 32 Debes teaches a method wherein assigning the priority values to the data channels comprises assigning the priority values upon initialization of the printing device in accordance with a predetermined priority assignment (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,').

As per claim 33, Debes teaches a method wherein assigning the priority values to the data channels comprises assigning the priority values via a user interface to apply user selected priorities to particular ones of the data channels (col. 4 lines 44-76, col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45)(' The interrupt system includes: a) a user interface, communicating with the multifunctional printing system, for designating one of the jobs in the first memory section or the second memory section as an interrupt job; b) wherein the interrupt job is transmitted from one of the first memory section and the second memory section to the print queue; and c) a controller for facilitating insertion of the interrupt job into a selected location of the print queue for the purpose of interrupting the job currently in the process of being printed, said controller') ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,')

As per claim 34 Debes teaches a method wherein determining relative priorities of the print jobs comprises comparing the priority values of the print jobs that are currently pending to each other (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment

jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.’)

As per claim 35, Debes teaches a computer readable program storage medium tangibly embodying a program of instructions executable by a print server system to process print jobs by performing steps comprising:

assigning priority values to a plurality of data channels that receive print jobs(col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,');

associating the priority value assigned to each data channel with print jobs received at its respective data channel (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,');

determining relative priorities of a plurality of print jobs based on their associated priority values(col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.'); and

Art Unit: 2127

printing print jobs in a sequence corresponding to the relative priorities associated with the print jobs (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.')

As per claim 36 Debes teaches a printing device coupled to receive print jobs transmitted by one or more computing devices, the printing device comprising: a plurality of data channels to receive the print jobs;

means for assigning a priority value to the data channels (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,');

means for attributing the priority value of the data channels to the print jobs received via its respective one of the data channels (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45) ('priority assigned according to job or user type. An exemplary priority assignment, based on job type,');

means for comparing the priority values of the print jobs that are pending, and for identifying the print job exhibiting the highest priority (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) ('In one embodiment jobs are placed in a queue as they are submitted to the

Art Unit: 2127

printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.’)

; and

means for printing the print jobs in an order from the highest priority to the lowest priority(col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) (‘In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.’)

As per claim 37, Debes teaches a printing device further comprising means for queuing the print jobs in the order from the highest priority to the lowest priority (col. 8 lines 22-38, col. 11 line 20 – col. 12 line 45, col. 14 lines 38-67) (‘In one embodiment jobs are placed in a queue as they are submitted to the printing system. If one type of job has a higher priority than another type of job then it will be placed before that job in the queue.’)

### *Conclusion*

Arguments made by Applicant are nonpersuasive and applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2127

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nilesh R Shah whose telephone number is 703-305-8105. The examiner can normally be reached on Monday-Friday 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

NS  
February 2, 2004

  
MENG-T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100